

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A transmission device of base station which is used for a movable communication system using a direct spread CDMA system, in which spread signal transmission data of all transmission channels are additively combined with each other to produce a quantized amplitude data, to change it to a modulation output signal of wireless carrier wave frequency by digital to analog conversion in accordance with a level of its value, to amplify a power of the modulation output signal by a transmission amplification means, and to transmit waves as a down-link transmitting output after power amplification,

said device having a variable attenuation means capable of controlling a level attenuation amount of the modulation output signal in an input side of the transmission amplification means, the input of the transmission amplification means being controlled so that it is not over a limited value by comparing a mean value of the amplitude data obtained over a predetermined time period with a predetermined maximum data to increase the level attenuation amount of the variable attenuation means in accordance with such the degree that to which the mean value of the amplitude data is over the maximum data, whereby the breakage of the transmission amplifier amplification means which is caused by the input of overpower and the distortion of the transmission spectrum can be prevented even during the down-link control of transmission power.

2. (Original) The transmission device of base station according to Claim 1, wherein:

said transmission channels includes a call channel, a control channel and a pilot channel and a cell size is reduced by reducing an electric power of pilot channel in accordance with an increasing amount of total electric power of connection channels where the amplitude data is over the maximum value.

3. (Currently Amended) The transmission device of base station according to Claim 1, wherein:

the <u>level mean</u> value <u>of the amplitude data</u> is compared with a predetermined threshold value more than the maximum value where the <u>mean value of the</u> amplitude data is over the maximum value, and where the <u>mean value of the</u> amplitude data is over the threshold value, such information signal is transferred to an upper control device.

4. (Currently Amended) A signal transmission device of base station which is used for base station of movable communication system using direct spread CDMA system, having a transmitter in which spread signal transmission data of all transmission channels are additively combined with each other to produce a quantized amplitude data and to change it to a modulation output signal of wireless carrier wave frequency by digital to analog conversion, and a transmission amplification means which amplifies a power of the modulation output signal to transmit waves as a transmission output to a movable station, said transmitter comprising:

an additive composite means to produce a quantized amplitude data;

a modulation means which converts the amplitude data to an analog base band signal in accordance with a level of its value and implements a modulation to wireless carrier wave frequency to change it to a modulation output;

a variable attenuation means capable of controlling an attenuation amount of the modulation output signal level in accordance with a value of control signal to be input; an amplification means which amplifies an electric power in order to output the modulation output signal, of which level is controlled by the variable attenuation means, as a transmitter output to the transmission power amplifier amplification means;

a transmission power inspecting means inspecting the level of the transmitter output to the <u>electric power transmission</u> amplification means and outputting a corresponding digital value as a transmission power data;

a first mean value-calculating means calculating a mean value of the amplitude data per a predetermined time provided by the additive composite means and making it a transmission mean value which shows a mean value of the transmission power level to be required;

a second mean value-calculating means calculating a mean value of the transmission power data per a predetermined time provided by the transmission power inspecting means and making it a transmission power mean value which shows a mean value of the actual transmission power; and

a comparative control means comparing the transmission mean value provided by the first mean value-calculating means with a predetermined maximum transmission power value and, where the transmission mean value is not more than the maximum transmission power value, outputting a data for supplementing, as the control signal to the valuable variable attenuation means, a difference between the transmission mean value and the transmission power mean value provided by second mean value-calculating means, or where the transmission mean value is more than the maximum transmission power value, outputting a data for supplementing, as the control signal to the valuable variable attenuation means, a difference between the maximum transmission power value and the transmission power mean value.

5. (Currently Amended) The signal transmission device of base station according to Claim 4, wherein:

said eomparison/control comparative control means inputs a predetermined threshold value more than the maximum transmission power value therein, compares the transmission mean value with the maximum transmission power value, compares the transmission mean value with the threshold value where the transmission mean value is over the maximum transmission power value, and where the transmission mean value is over the threshold value, outputs such information signal to an upper control device.

- 6. (Currently Amended) A CDMA movable communication system comprising a plurality of base stations using the base transmission device of Claim 4, and movable stations moving between cells formed by the base stations and, while inspection of the cell for its movable station stations is carried out and control of the transmission power is carried out with the base station controlling the cell, earrying out communication processing, each of the base station reducing the cell size by reducing an electric power of pilot channel in accordance with an increasing amount of total electric power of connection channels transmitted to the movable station stations where the transmission mean value is more than the maximum transmission power value.
- 7. (Currently Amended) A CDMA movable communication system comprising a plurality of base stations using the base transmission device of Claim 5, movable stations moving between cells formed by the base stations and, while inspection of the cell for its

movable station stations is carried out and control of the transmission power is carried out with the base station controlling the cell, earrying out communication processing, an upper control station managing the base stations and the movable stations, said base station, where the transmission mean value is over the threshold value, outputting such information signal to the upper control station, and said upper control station managing the number control and the power control for a constant time after receipt of the notice signal so that total electric power of down-link call channels in the base station is not increased.